



Regional Income and Output

Analysis of County Incomes and Regional GDP, 2012

*Western Development Commission
Report, October 2015*

Summary

This short report provides a summary of key figures and trends in both county incomes and in regional GVA and also makes comparison with other European and OECD regions. County level data on household and per capita disposable incomes is released every year by the CSO alongside data on Gross Value Added (GVA¹) at a regional level. As the information is derived from a variety of sources which take time to collect and collate there is a time lag for the publication of the regional data. The data for 2012 are therefore the most recent available data and were published in 2015². While the data is not current (2012), it is still useful to look at the trends over time and the relative situation in the regions at that point in time when recovery was beginning in some regions.

County Income data allows us to compare incomes among counties in the Western Region and to examine trends over time. It also shows the different components of making up the total income figure in each county. The GVA data at regional level is important for tracking regional output levels and trends as well as changes among regions. The figures can be used for comparison with other regions of similar size or type in the EU and beyond.

This is one of the regular reports produced by the Western Development Commission looking at recently published data from a Western Region perspective.

Key County Household Disposable Income Statistics for the Western Region, 2012

Income Statistic	Donegal	Leitrim	Sligo	Galway	Mayo	Roscommon	Clare	Western Region	State
Disposable income per person	€15,921	€18,096	€18,456	€18,890	€17,774	€ 16,827	€17,724	€17,735	€19,468
% of State average	81.8%	93.0%	94.8%	97.0%	91.3%	86.4%	91.0%	91.1%	100.0%
Change in disposable income 2011-2012 (%)	-2.0%	-0.4%	1.6%	2.9%	0.8%	0.2%	-0.1%	0.8%	0.8%
Primary income as proportion of disposable income	77.9%	86.3%	89.8%	95.5%	86.3%	90.4%	96.0%	n/a	99.1%

- The household disposable income per person in the Western Region was €17,735 in 2012, a small increase on the level in 2011 (€17,593). It is still significantly below its peak of €21,167 in 2008. The Western Region household disposable income was 91.1% of the State average which was €19,468.
- Disposable income in all Western Region counties grew between 2003 and 2008, and then fell in all Western Region counties to 2011. This 2012 data is the first to show growth in disposable incomes in

¹ GVA is the subnational equivalent of GDP. It is sometimes referred to as Regional GDP.

² Some data on regional GDP for 2013 has been released by Eurostat and is discussed later but it is not directly comparable with data in this release.

some counties of the Western Region (Sligo, Galway, Mayo and Roscommon). Galway experienced a growth of 2.9% and Sligo a growth of 1.6%. Growth in income did not occur in all Western Region counties, it fell in Donegal by 2%, Leitrim by 0.4% and Clare by 0.1%.

- In 2012 the highest level of disposable income in the seven Western Region counties was in Galway at €18,890. This is 97% of the State average. The lowest was in Donegal at €15,921 (81.8% of the State average).
- The gap between the average household disposable income in the Western Region and the State in 2012 remained stable at 91.1% as it was in 2011. Over the long term there has been a narrowing of the gap in disposable income with the Western Region 89.1% of the State average in 2000 and 84.3% in 1995.

Key Regional GDP (GVA) Statistics, 2012

	Border	Midland	West	Dublin & Mid East	Mid West	South East	South West	State
GVA per person	€19,016	€18,636	€28,256	€43,306	€27,464	€23,588	€44,391	€34,308
Index of GVA per Person (State=100)	55.4	54.3	82.4	126.2	80.1	68.8	129.4	100
Index of GVA per Person (EU28=100)	72.1	70.6	107.1	164.1	104.1	89.4	168.2	EU28=100
% national GVA	6.2%	3.3%	8.0%	49.6%	6.6%	7.5%	18.7%	100.0%

- In 2012 the GVA³ per person in the West region was €28,256 and €19,016 in the Border region. These compare with a State figure of €34,308
- GVA in 2012 was still below that of 2007 in all regions except the West, where recovery in GVA has been strong. Both Dublin & Mid East and the South West regions also showed strong signs of recovery with GVA for 2012 close to that in 2007. In other regions (especially the Border and Midland) the GVA for 2012 is still significantly below that of 2007.
- At NUTS 3 level GVA per person was highest in the South West is highest at €44,391 and Dublin & Mid East are combined was €43,306 per person. It was lowest in the Midlands at €18,638 (down from a peak of €27,097 in 2006).
- The index of GVA for NUTS 3 regions (State=100), in 2012 the Border region was 55.4 and the West region 82.4. There has been a widening of disparities among regions since the recovery began.

³Note that GVA figures are not available at county level, so the NUTS3 regions have been used.

- While Dublin & Mid East contributes 49.6% of national GVA, the West contributes 8.0% and the Border 6.2%. These figures are influenced by the numbers of economically active people, commuting, the presence of multi nationals as well as the productivity and the levels of capital and infrastructure in each of the regions.
- Looking at the higher level regions (NUTS 2) Gross Value Added (GVA) per person in the Border Midland and West (BMW) region in 2012 was €22,242, (a slight decline since 2011 when it was €22,501) and a fall of 18% (€4,915) since 2008. In 2012 GVA per person at basic prices in the BMW was only 57% of that in the Southern and Eastern region (where it was €38,789).
- Comparing indices of GVA for the NUTS 2 regions (State=100) the BMW was 64.8 and the S&E was 113.1. This represents a significant widening of the gap between the BMW and the S&E regions since 2008 (when the BMW was 71.9 and the S&E was 110.2).

Introduction

Examining regional indicators helps us to understand where growth and development is taking place, to highlight changes and to assess issues of efficiency and equity among regions. Regional development (and more broadly national development) is a multi-dimensional concept and in order to understand it better it is necessary to examine information from a variety of sources to give insights into economic, social and environmental outcomes. A regional perspective on national growth and development is important since inequalities not only occur among individuals but also in the places where they live⁴.

Clear information and analysis of the meaning and trends in regional indicators can inform the design of effective strategies to improve the contribution of regions to aggregate performance and can suggest policy interventions to improve efficiency, equity and sustainable development.

In order to understand regional economies and their development the OECD⁵ suggests that we need to consider a number of questions:

1. How are assets distributed across regions and how do they contribute to national growth?
2. Do regional disparities tend to persist?
3. What are the common features of regions that have achieved beneficial outcomes?
4. What are the unused resources that need to be mobilised to maximise a regions competitive edge and well-being?

The first two of these questions are considered in this report. As a start to addressing the third question we make some basic comparisons with other regions to see what we can learn from similar regions in terms of both their experiences and policies. Answering the fourth question is an important part of WDC on going policy work and is particularly important in the context of a new spatial planning cycle.

This short report provides a summary of key figures and trends in both county incomes and in regional GVA and some International and European comparison is provided at the end of this report. It is one of the regular reports produced by the Western Development Commission looking at recently published data from a Western Region perspective

County level data on household and per capita disposable incomes is released every year by the CSO alongside data on Gross Value Added (GVA⁶) at a regional level. As the information is derived from a variety of sources which take time to collect and collate there is a time lag for the publication of the regional data. The data for 2012 are therefore the most recent available data and were published in 2015⁷. While the data is not current, it is still useful to look at the trends

⁴ OECD, 2011, 'Interpreting OECD Regional Indicators' in *OECD Regions at a Glance 2011*, OECD Publishing

⁵ Ibid.

⁶ GVA is the subnational equivalent of GDP. A more detailed explanation is provided later.

⁷ Some data on regional GDP for 2013 has been released by Eurostat and is discussed later but it is not directly comparable with data in this release.

over time and the relative situation in the regions at a point in time when economic recovery had begun in some regions.

The county income data allows for useful for comparison of household income levels among counties and for examining trends over time and it also highlights the different components of making up the total income figure in each county, including primary income.

This GVA data at regional level is important for tracking regional output levels and monitoring trends over time, and changes among regions. Although there are limitations to this indicator, in particular in relation to the impact of commuting and the impacts of transfer pricing and profit repatriation, it is a key indicator of regional economic development. The figures also provide opportunities for comparison with other regions in the EU and with regions of similar size or type internationally.

Household disposable income per head at county level

In this section income⁸ at county level is considered, with particular focus on disposable income per head. Disposable income includes both primary income and social benefits and other transfers less taxes and social contributions. As such it indicates the level of material wealth of households residing in different regions. This is a better indicator of material well-being of citizens than GDP per person. It is based on the region of residence and so is not subject to the same issues with commuting as GDP per inhabitant (as discussed in the next section on regional GVA).

It should be noted that although county figures are available they involve uncertainty because of the necessity of estimating populations in counties; nonetheless they do provide a useful indication of the degree of variability at county level. In order to estimate Household Disposable Income figures for the Western Region (the seven counties under the WDC remit), inferred population estimates were used, based on those used for each county by the CSO in this release. A summary table of the key county income statistics is provided below.

Key County Income Statistics for the Western Region, 2012

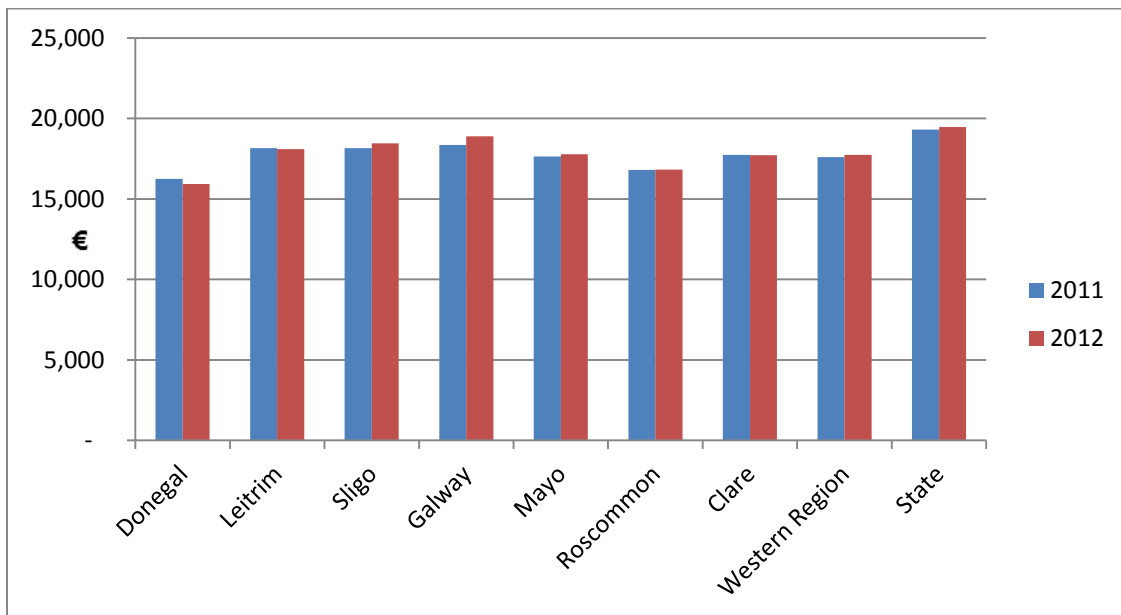
Income Statistic	Donegal	Leitrim	Sligo	Galway	Mayo	Roscommon	Clare	Western Region	State
Disposable income per person	€15,921	€18,096	€18,456	€18,890	€17,774	€16,827	€17,724	€17,735	€19,468
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Change in disposable income 2011-2012 (%)	-2.0%	-0.4%	1.6%	2.9%	0.8%	0.2%	-0.1%	0.8%	0.8%
Primary income as proportion of disposable income	77.9%	86.3%	89.8%	95.5%	86.3%	90.4%	96.0%	n/a	99.1%

⁸ *Total income* is defined as: Primary income *plus* Social benefits *plus* Other current transfers. *Disposable income* is defined as follows: Total income *minus* Current taxes on income (*i.e.* Income taxes, other current taxes) *minus* Social insurance contributions (*i.e.* Employers', employees', self-employed, etc.)

Source: County Incomes and Regional GDP, 2012, various tables and own calculations

The household disposable income per person in the Western Region⁹ was €17,735 in 2012, a small increase on the level in 2011 (€17,593). It is still significantly below its peak of €21,167 in 2008. In 2012 the highest level of disposable income in the seven Western Region counties was in Galway at €18,890 (Figure 1). This is 97% of the State average. The lowest was in Donegal at €15,921 (81.8% of the State average). Disposable Income per person for the State was €19,468 per person.

Figure 1: Disposable income per person in the Western Region 2011 and 2012 (€)



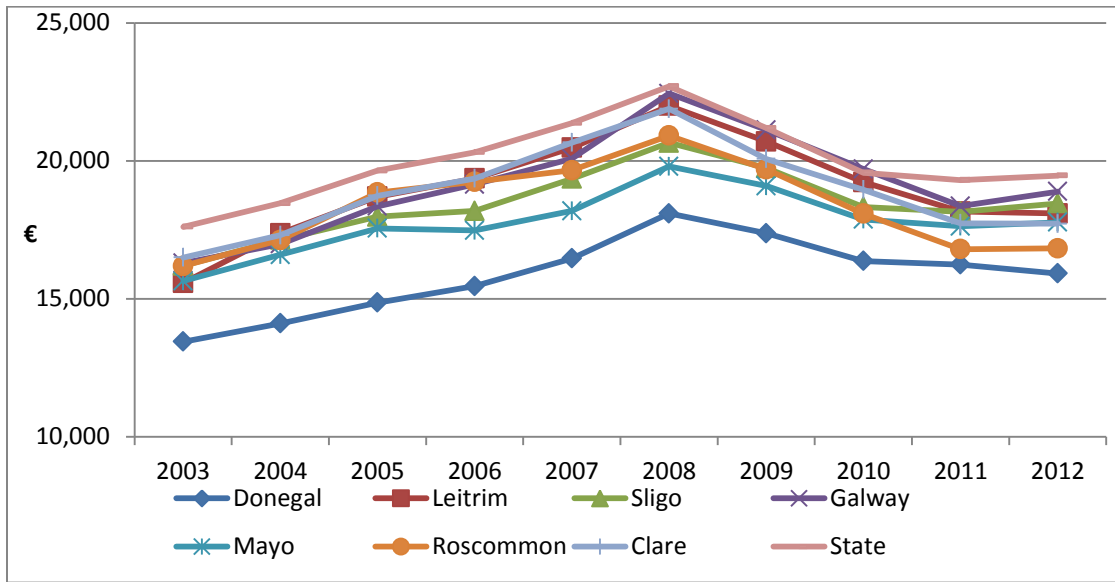
Source: County Incomes and Regional GDP, 2012, Tables 1&2

Changes in disposable income per capita between 2011 and 2012 varied among counties. While Galway experienced a growth of 2.9% and Sligo a growth of 1.6%, in Donegal disposable incomes fell by 2% and in Leitrim by 0.4%.

The changes in disposable income over time are shown in Figure 2, with the 2008 peak very evident.

⁹ The average was calculated using inferred population figures for the counties of the Western Region from the CSO County incomes and Regional GDP Table 1

Figure 2: Disposable income per person in the Western Region 2003 to 2012



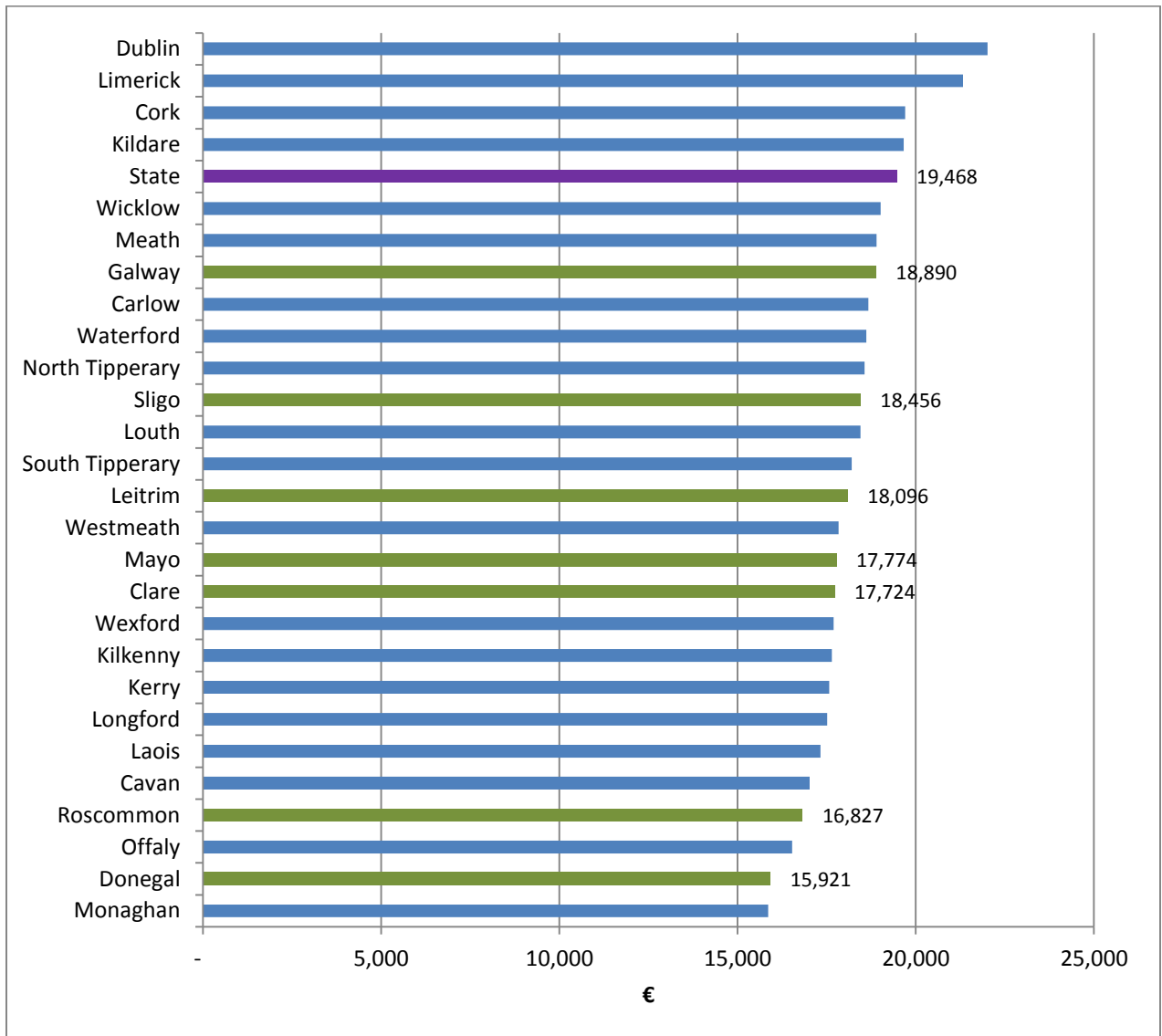
Source: County Incomes and Regional GDP, 2012, Table 3

Disposable income in Western Region counties grew between 2003 and 2008, and then fell in all Western Region counties to 2011. This 2012 data is the first to show some growth in disposable incomes (in Galway, Sligo, Mayo and Roscommon in the Western Region) and there was a decline in incomes in Donegal, Leitrim and Clare.

The gap between the average household disposable income in the Western Region and the State in 2012 remained stable at 91.1% as it was in 2011 and also 2009. Over the long term there has been a narrowing of the gap in disposable income with the Western Region 89.1% of the State average in 2000 and 84.3% in 1995.

Information for all counties in Ireland is shown in Figure 3 below.

Figure 3: Disposable income per person in each county, 2012



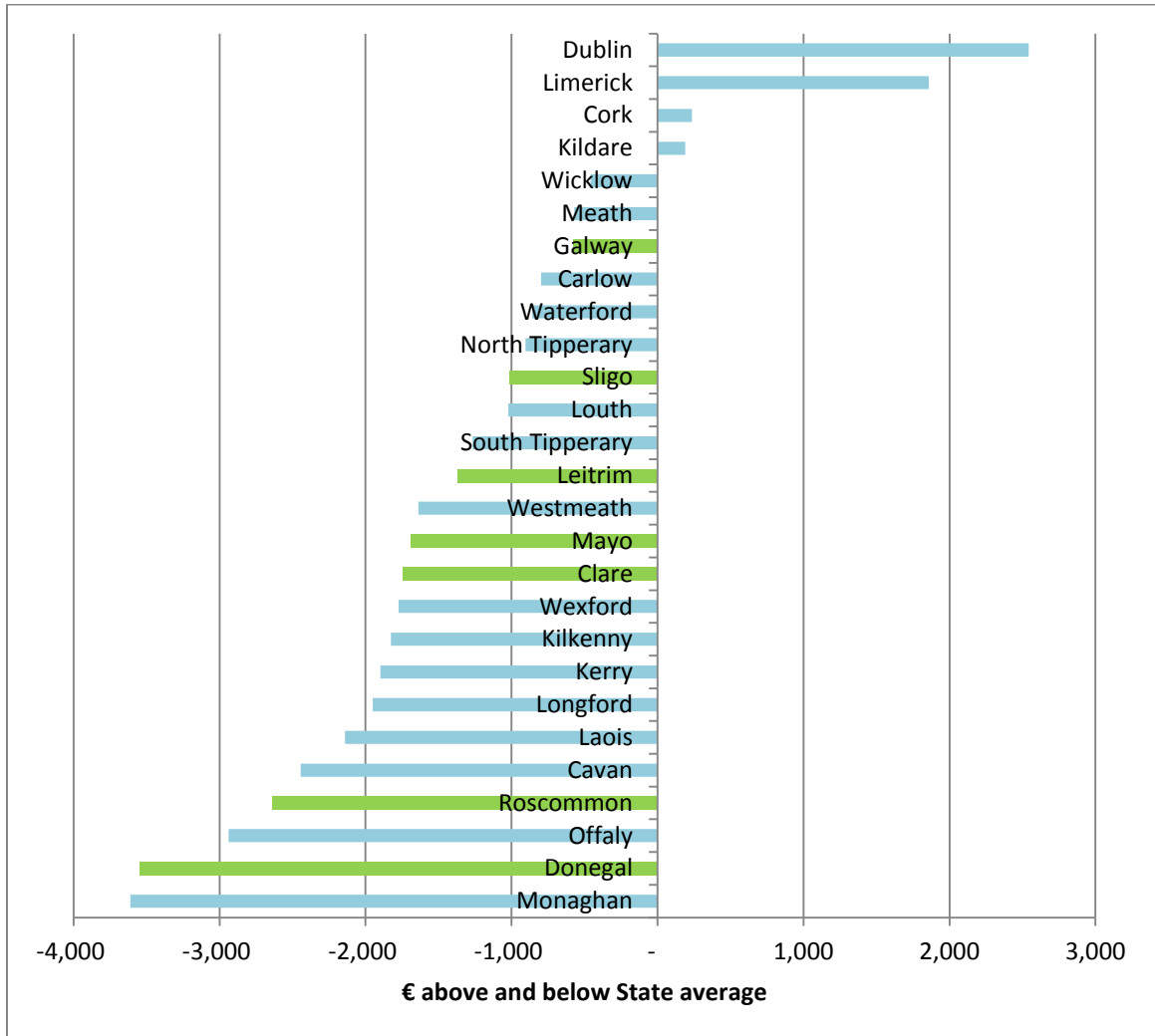
Source: County Incomes and Regional GDP, 2012, Table 1

Disposable income per person in each of the seven Western Region counties was below the State average in 2012. The Western Region county with the lowest household disposable income per head was Donegal (€15,921) which was 81.8% of the State average. This is the second lowest household disposable income for any county in the State (Monaghan had the lowest).

Disposable income for each county, relative to State per person disposable income, is shown in Figure 4 below. Dublin, Kildare, Limerick and Cork were the only counties where disposable income per person exceeded the State average in 2012. Donegal and Roscommon were the two

Western Region counties with disposable income most significantly below that of the State.

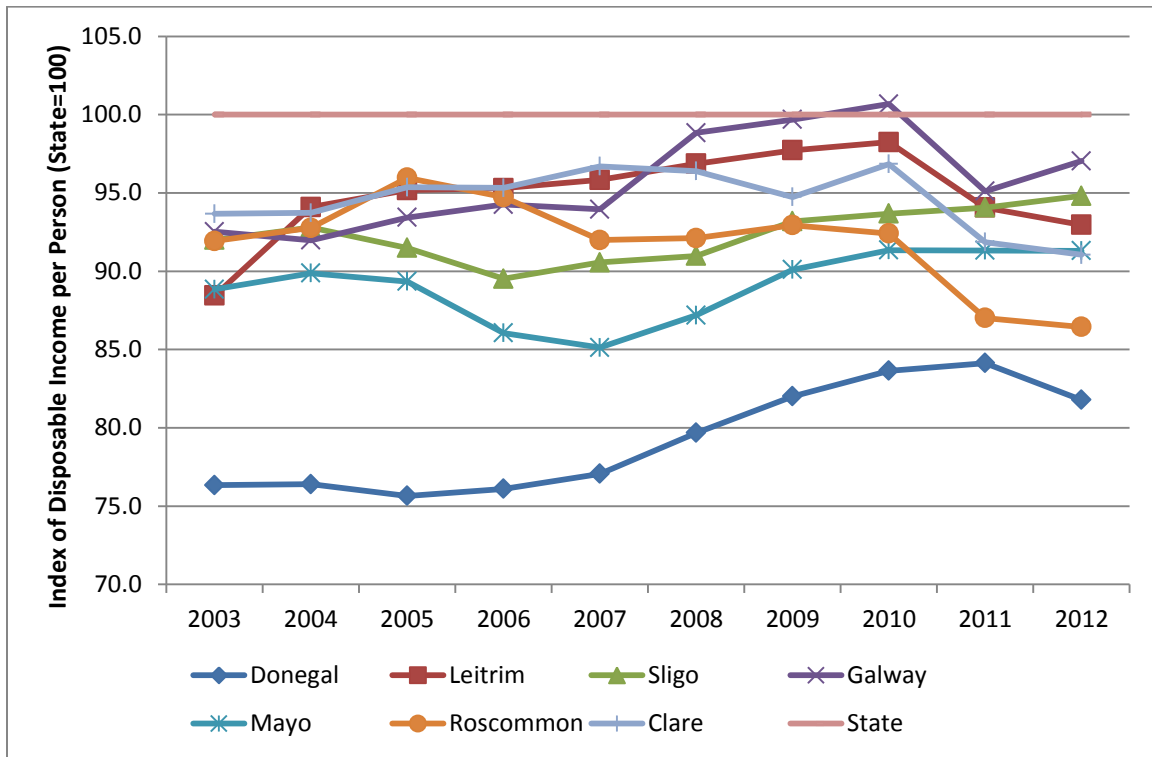
Figure 4: Disposable income per person in each county -variation from the State, 2012



Source: County Incomes and Regional GDP, 2012, Table 1

It is also useful to look at the variation in income relative to the State average over time. This is best shown in index form (Figure 5).

Figure 5: Index of Disposable Income per person 2003-2012 (State = 100)



Source: CSO County Incomes and Regional GDP 2012, Table 4

Disposable income in most of the Western Region counties has been rising relative to the State average, with some variation over time (Figure 5 shows how each county has done relative to the State in the ten years to 2012, State=100 which is shown as the pink line). Some counties have performed relatively well. Good performance depends both on economic growth and the stability of some social transfers (the pension for example) relative to the more volatile primary income component¹⁰. Donegal, Mayo and Leitrim have higher social transfer components than other counties in their disposable income. However although Galway and Sligo received relatively fewer social transfers they have performed well based on strong primary incomes growth. This is discussed further in the next section.

The index for Donegal has risen quite steadily in the ten years to 2012 from 76.3 to a peak of 84.1 in 2011, there has been a small decline since then (81.8 in 2012), nonetheless disposable income per person in Donegal remains the lowest in the Western Region. Galway has been the best performer in the region moving from an index of 92.5 in 2003 to a peak in 2010 when its index was above 100.0, though there has been some decline since (97.0 in 2012) it is still the

¹⁰ Household *Primary Income* is defined as Compensation of employees (i.e. Wages and Salaries, Benefits in kind, Employers’ social insurance contributions) plus Income of self-employed plus Rent of dwellings (including imputed rent of owner-occupied dwellings) plus Net interest and dividends.

closest county in the region to the State average. Sligo has also performed well with its index improving almost every year since 2003 (92.0 to 94.8 in 2012). This is its highest index level in this last ten years.

The index for Mayo was 88.8 in 2003 but declined over the following years to a low in 2007 of 85.1 relative to the disposable income in the State. Since then, however, it rose to 91.3 in 2010 and has remained steady. Leitrim also improved steadily over the period (from 88.4 in 2003 to 98.2 in 2010 with a decline to 93.0 in 2012). During this period it has moved closer to the State disposable income than Clare, Mayo or Roscommon.

The exceptions to the improving trend are Clare and Roscommon. The index of disposable income in Clare rose from 93.7 in 2003 to a peak of 96.8 in 2010, but has since fallen to an index of 91.0 relative to the State as a whole.

In Roscommon, the index relative to the State in 2003 was 91.9 and it peaked in 2005 at 96.0. There has been a decline most years since then and in 2012 it had fallen to 86.4, the second lowest in the region (and 4rd lowest in the State behind Offaly, Donegal and Monaghan). While Roscommon has relatively strong primary income (for one of the less well-off counties) it appears to benefit relatively less from social transfers.

Primary income

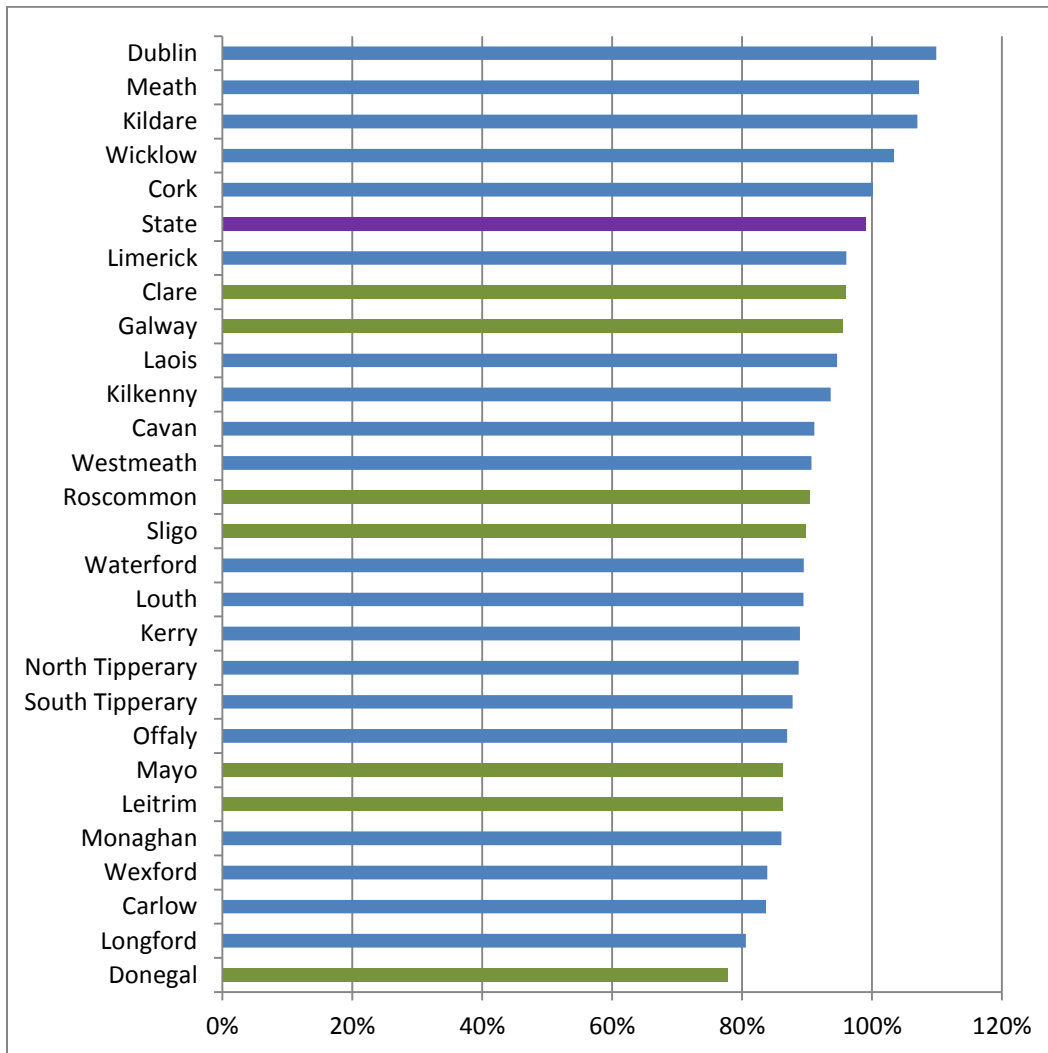
It is useful to look at the relationship between primary income¹¹ and household disposable income. In counties with higher employment rates and lower dependency ratios, the primary income level will be greater than or similar to the household disposable income indicating a relatively lower inflow of social transfer and a relatively higher tax out flow. Primary income as a percentage of household disposable income is shown in Figure 6 below.

In the counties of Dublin, Kildare, Meath, Wicklow, and Cork primary income exceeded disposable income in 2012. These are the counties with the highest employment rates as indicated in the results of the 2011 census. But the relationship between the primary income and disposable income also depends on the demographics of each county, including the numbers of pensionable age, number of children and number in receipt of other benefits. In the counties of Donegal, Carlow, Wexford and Longford, primary income made up less than 85% of disposable income, with a greater proportion of social transfers in their disposable income. In another nine counties primary income made up less than 90% of disposable income.

¹¹ Primary income is made up of income from employment, rent of dwellings and net interest and dividends. This is mainly income from productive sources. Adding social transfers to primary income and subtracting off income taxes and social insurance contributions results in disposable income.

In the Western region, Clare and Galway (both 96%) had the highest levels of primary income as a percentage of disposable income, while in Leitrim and Mayo (both 86%) and Donegal (78%) had the lowest.

Figure 6: Primary income as a percentage of household disposable income



Source: CSO County Incomes and Regional GDP 2012, Table 1

Interestingly, Roscommon, which is a relatively poor county (disposable income €16,827, second lowest in the Western Region) and with a high dependency ratio, has, along with Sligo, the third highest rate of primary income (90%) as a proportion of household disposable income. In contrast, primary income makes up more than 100% of household disposable income in Meath, Kildare and Dublin, relating to their lower dependency ratios and higher employment rates.

Social transfers make up an important part of household disposable income¹². In Donegal they were 41% of household disposable income, and 35% in Leitrim and Mayo. They are also very significant (32%) in Roscommon and Sligo, while the lowest counties in the Region were Galway (30%) and Clare (31%). Nationally the lowest percentage of income from social transfers was Meath (23.5%).

In contrast to most counties in Ireland, the disposable income per inhabitant of most European regions¹³ is generally lower than the corresponding figure of primary income per inhabitant. This is particularly true for regions characterised as having some of the highest earners (often capital regions) as tax and social security contributions usually increase as a function of income. A comparison between regional household disposable income and primary income shows the levelling role State intervention can play with the convergence of disposable income per inhabitant between 'rich' and 'poor' regions. Social transfers include old age pension and child benefit payments and so are strongly associated with the demographic characteristics of the regions. Poorer regions tend to have higher dependency ratios, with a higher proportion of older age and child populations while wealthier regions have a relatively higher proportion of people of working age.

Current transfers to households significantly reduce the difference between the highest and lowest regional values. In Europe at NUTS 2 level 51 regions (of 272) had higher levels of disposable income per inhabitant than primary income. In Ireland at NUTS 2 level in the Southern and Eastern region primary income is higher than household disposable income (102%), while it is the reverse in the BMW (89%).

Household income levels are, of course ultimately dependent on the economic activity and output of each country and region. This is considered in the next section with discussion of Regional GDP.

¹² These are simple percentages of household disposable income but the statistical discrepancy means that the sum of primary income and social transfers is not equal to total household income. See http://www.cso.ie/en/media/csoie/releasespublications/documents/economy/2012/nie_2012.pdf for more discussion

¹³ Eurostat, 2015, http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP_at_regional_level

Regional GDP in 2012 (measured as GVA)

Gross Value Added (GVA) (and the related regional GDP¹⁴), provides a measure of the output and the value creating performance and economic activity of the each region. It also provides a basis for comparison among regions within Ireland and internationally. It is a key statistic used in the Forfás Regional Competitiveness Agendas¹⁵ and is used for monitoring the implementation of the Regional Planning Guidelines¹⁶.

There are a number of limitations to this statistic and it therefore should be treated carefully. It is important to remember that while it may be used to compare the degree of economic development of regions it does not measure the income ultimately available to private households in a region. Nor does it take account of externalities such as environmental sustainability or social inclusion which are increasingly considered as important drivers of quality of life.

In relation to understanding the relative economic position of households there is discussion of various other options which take account of income, consumption and wealth¹⁷. Taking these three together would provide a better picture, but a lack of regional statistics in some of these areas is a problem. Hence regional GDP remains a key statistic but the following must be considered.

One of the main drawbacks of regional GDP per capita is that in some regions the GDP per capita figures are significantly influenced by commuter flows. The value of the GDP is allocated to the place of work (e.g. Dublin) and to compute the per capita figure it is divided by the population of that region even though many of the workers producing the output of that region are travelling from another region (e.g. the Mid East). Net commuter inflows in these regions push up GDP to a level that could not be achieved by the resident active population on its own. There is a corresponding effect in regions with commuter outflows. This is particularly important for a region like the Mid East where commuting to Dublin is very common (so Dublin & Mid East are considered together in this report), but a similar effect on a smaller scale could be seen in other regions.

GVA levels are also affected by both transfer pricing methods used (for pricing of goods and services transferred between branches of a multinational company, and which may overstate

¹⁴ GDP is Gross Domestic Product, GDP and GVA are the same concept i.e. they measure the value of the goods and services (or part thereof) which are produced within a region or country. GDP is valued at market prices and hence includes taxes charged and excludes the value of subsidies provided. GVA at basic prices on the other hand excludes product taxes and includes product subsidies. See background notes on <http://www.cso.ie/en/releasesandpublications/er/cirgdp/countyincomesandregionalgdp2012/>

¹⁵ Forfás, 2009, Regional Competitiveness Agendas : Overview, Findings & Actions

¹⁶ Regional Indicators report, 2013, Monitoring Framework for Implementation of the Regional Planning Guidelines

¹⁷ OECD (2013), *OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth*, OECD Publishing. <http://dx.doi.org/10.1787/9789264194830-en>

the value of the production in a particular region) and by profit repatriation by multinationals which are included in the value of regional GVA but which are not available to the economy of the region.

There has been much discussion of the difference between GDP and GNP at national level (as GNP excludes transfer pricing and profit repatriation, and in Ireland is approximately 20% less than GDP) but only GDP figures (expressed as GVA) are available at regional level. Hence it is difficult to assess the impacts of transfer pricing and profit repatriation at a regional level and how this may affect perceived disparities (though some estimates of this have been made previously¹⁸).

Finally, GDP per inhabitant is often regarded as a proxy indicator for overall living standards, but it should not be used in isolation, partly because of the difficulties noted above and because personal income includes items such as social welfare benefits which are not included in GVA. Additionally GVA is strongly associated with the proportion of the population in employment and so regions with a higher proportion of older people and children will likely have relatively lower GDP. Nonetheless, despite these caveats, GVA is an important regional indicator and is discussed in detail here.

GVA per person in the regions

GVA per person is the easiest way to compare across regions, but indices are often used to examine the position of regions relative to the State or the EU trends over time can usefully be done using indices. GVA from different sectors can also be considered at a regional level. The key regional GDP statistics for the NUTS3 regions in Ireland are shown in the table below.

Table 2: Key Regional GDP Statistics for Ireland's Regions, 2012

	Border	Midland	West	Dublin & Mid East	Mid West	South East	South West	State
GVA per person*	€19,016	€18,636	€28,256	€43,306	€27,464	€23,588	€44,391	€34,308
Index of GVA per Person (State=100)	55.4	54.3	82.4	126.2	80.1	68.8	129.4	100
Index of GVA per Person (EU28=100)	72.1	70.6	107.1	164.1	104.1	89.4	168.2	EU28=100
% national GVA	6.2%	3.3%	8.0%	49.6%	6.6%	7.5%	18.7%	100.0%

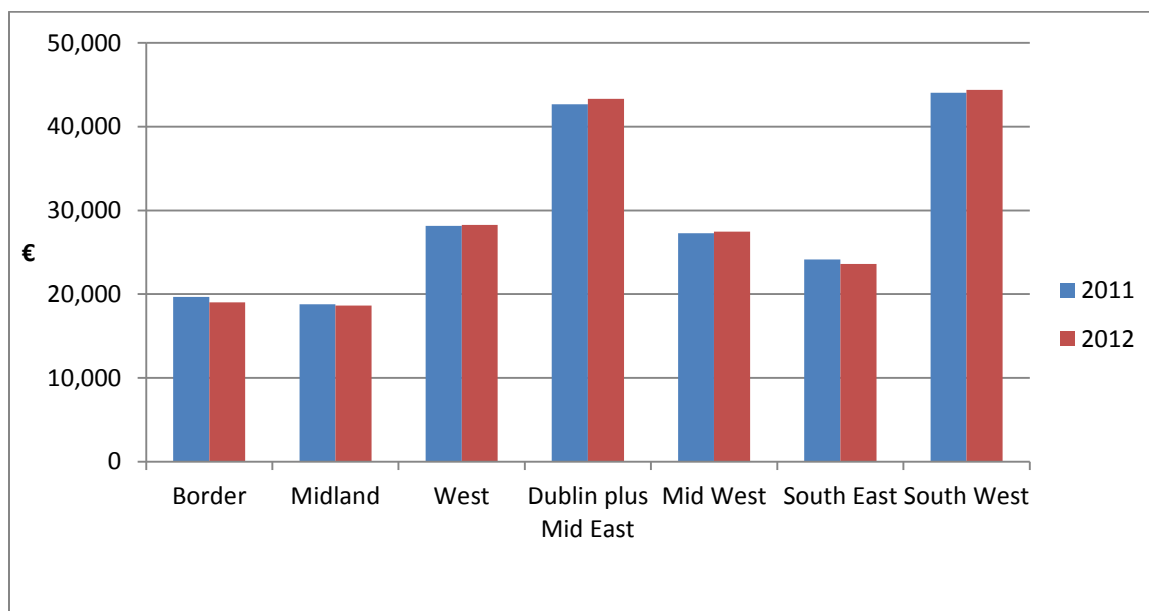
¹⁸ See O'Leary, E., 2000. "Aggregate and Sectoral Convergence Among Irish Regions: The Role of Structural Change: 1960-96", *Department of Economics UCC Working Paper Series*, 00-5, Cork: University College Cork, pp. 1-34 and O'Leary, E., 1999. "Regional Income Estimates for Ireland: 1995", *Regional Studies*, Vol. 33(9), pp. 805-814.

Contribution to GVA in region from :	Border	Midland	West	Dublin & Mid East	Mid West	South East	South West	State
Agriculture, Forestry and Fishing	3.4%	2.8%	1.9%	0.4%	2.3%	4.0%	2.1%	1.5%
Manufacturing and Construction	28.4%	19.9%	40.2%	14.9%	30.4%	31.0%	51.6%	27.0%
Market and Non-Market Services	68.2%	77.3%	57.9%	84.7%	67.3%	65.0%	46.4%	71.5%

Source: CSO County Incomes and Regional GDP, 2012, Tables 9, 10, 11, 16, 17

GVA increased slightly between 2011 and 2012 in the four of the seven regions (West, Dublin & Mid East, Mid West and South West); it declined in the Border and South East regions and there was also a very slight decline in the Midland region (Figure 7).

Figure 7: GVA (€) per person by NUTS3 Region 2011 and 2012



Source: CSO County Incomes and Regional GDP 2012, Table 9

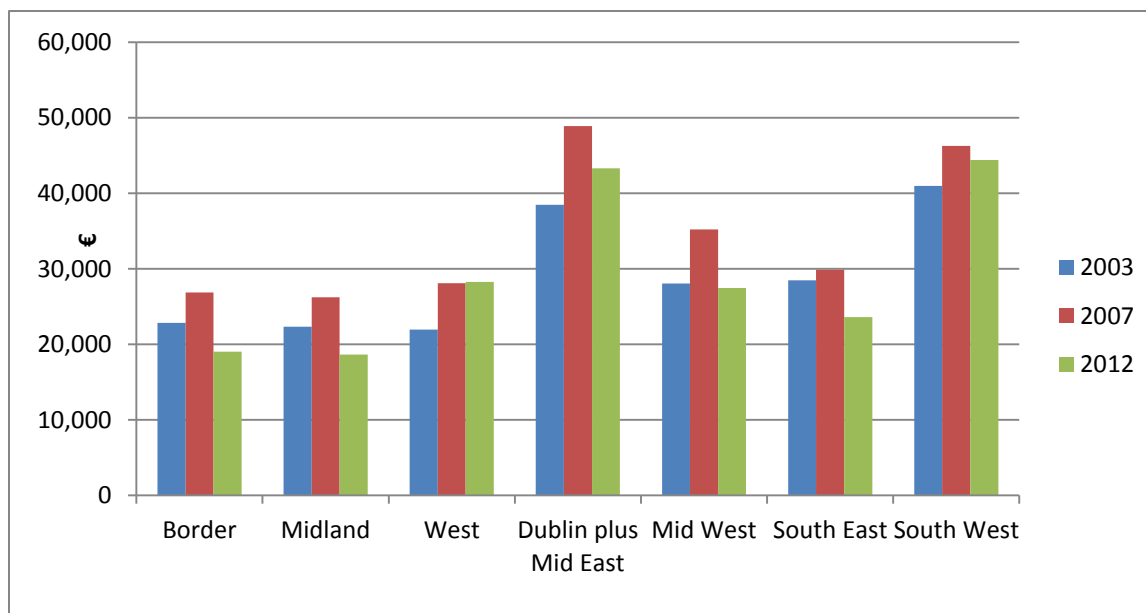
In 2012 GVA per capita was highest in the South West at €44,391 (when Dublin & Mid East are combined¹⁹). The lowest GVA was in the Midlands at €18,638 (down from a peak of €27,097 in

¹⁹ Alone the Dublin region was €51,839 but as noted previously the effect of commuting means this figure does not reflect the population outside Dublin involved in producing this output

2006). Both the West and Mid West showed very slight increases in per capita GVA for 2012 on 2011 while the GVA decline continued in the Border region though the decline was very small (-0.03%).

In considering the impact of the economic crisis it is interesting to compare the GVA in each region in 2003, 2007 and 2012 (Figure 8) as 2007 was the peak GVA year all NUTS regions except Border and Midland (which had their highest GVA levels in 2006).

Figure 8: GVA (€) per person at basic prices in 2003, 2007 and 2012



Source: CSO County Incomes and Regional GDP 2012, Table 9

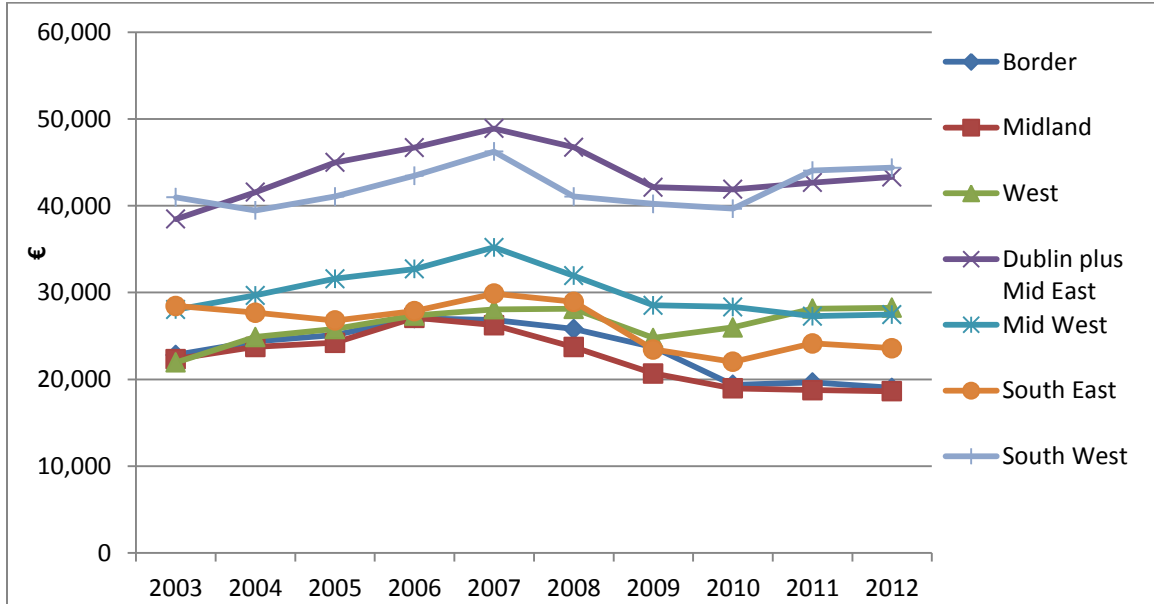
GVA per person in 2012 was still below that of 2007 in all regions except the West, where recovery has been strong. The West is the only region where GVA in 2012 was higher than in 2007. Both Dublin & Mid East, and the South West also showed strong signs of recovery by 2012 and their GVA for 2012 was close to that in 2007²⁰ and for both, by 2012 was again higher than that in 2003. **In four of seven regions (especially the Border and Midland, and South East) the GVA for 2012 is still significantly below that of 2007, and also remained below that of 2003.**

Looking at the pattern over a ten year period, rapid growth for the five years from 2003 to 2007 was followed by a decline in GVA per person levels in all regions for the next two years. GVA per person in the West had increased by 2010 and has continued to grow. Likewise GVA per person

²⁰ It should be noted that GVA levels can be affected by the presence of multi nationals in a region and transfer pricing of products which will increase the levels of GVA.

in Dublin & Mid East had begun to increase in 2010 and in the South west from 2011 and 2012. (Figure 9 below).

Figure 9: GVA (€) per person in NUTS3 Regions 2003-2012



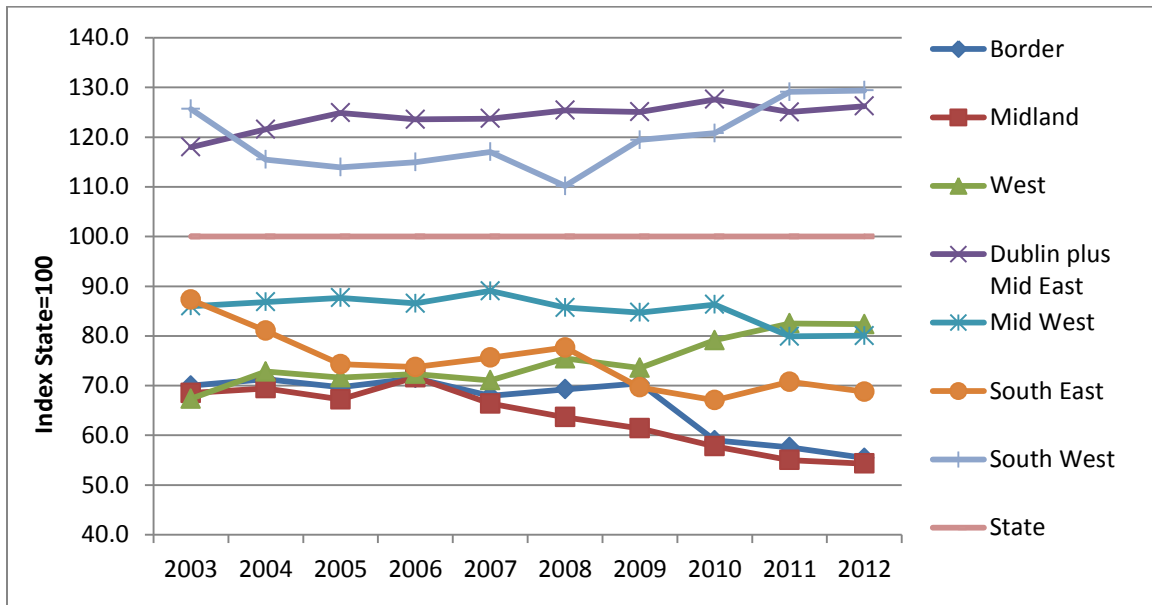
Source: CSO County Incomes and Regional GDP 2009, Table 9

There has been a levelling off of GVA per person in the other regions in the 2011 and 2012, but the Border and Midland regions have shown least sign of recovery.

Regional per capita GVA compared to the State

It is useful to consider GVA in the different regions indexed relative to the State Index which is set at 100 for each year (Figure 10). At NUTS3 level in 2012 the index for the highest, the South West, was 129.4 and Dublin & Mid East (126.2) was also consistently above the State. In 2012 the lowest relative to the State was the Midland, was 54.3. The West region index was 82.4 and the Border was 55.4. **In 2003 the difference between the highest and lowest was 65.8 index points but by 2012 was 75.1 index points.**

Figure 10: Index of GVA 2003-2012 State=100



Source: CSO County Incomes and Regional GDP 2009, Table 10

Comparing indices of GVA at NUTS 2 level (State=100), as this is the level available for use in international comparisons, the BMW was 64.8 and the S&E was 113.1. This represents a decrease from 2007 when the index for the BMW was 71.9. There has been a significant widening of the gap between the BMW and the S&E regions since 2008.

Looking at the NUTS 2 regions the Gross Value Added (GVA)²¹ per person in the Border Midland and West (BMW) region²² in 2012 was €22,242, a slight decline since 2011 when it was €22,501, and a fall of €4,915 (18%) since 2008. In 2012 GVA at basic prices in the BMW was only 57% of that in the Southern and Eastern Region (where it was €38,789).

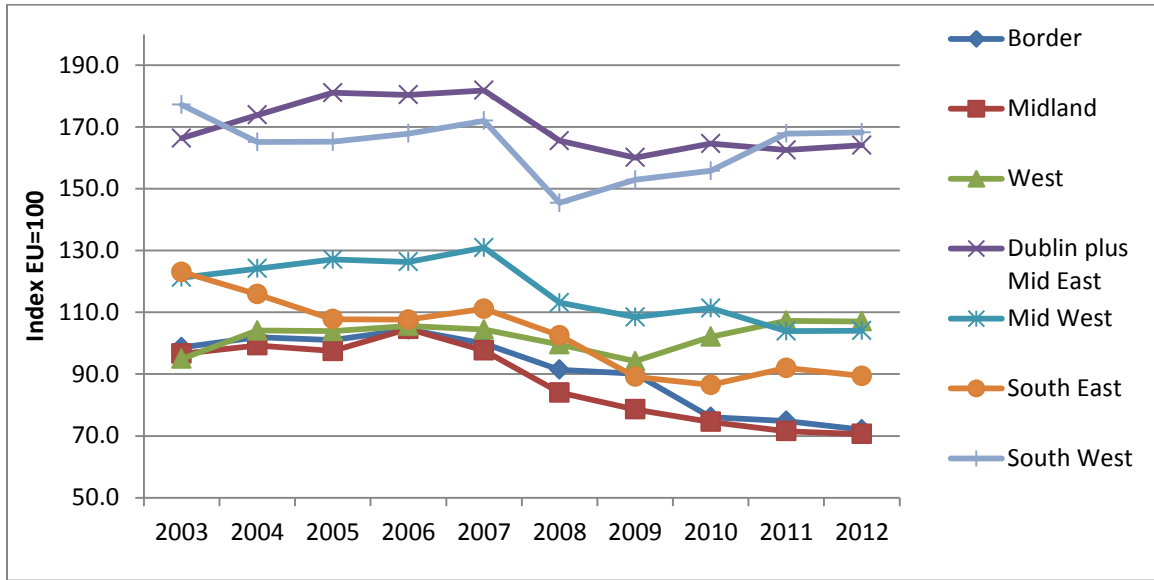
Comparing with the EU

It is also useful to look at Regional GVA when compared to the EU average. The CSO provides an index of GVA where the EU 28=100. This means that comparison across all EU regions can be made.

²¹Gross Value Added (GVA) at basic prices in a measure of the value of the goods and services produced in a regions (less the materials and services used which come from outside the regions) priced at the value which the producer received minus any taxes payable plus any subsidies receivable as a consequence of their production or sale. GVA at Basic Prices are used throughout this note (rather than GVA at Factor Cost)

²² GVA figures are not available at county level. They are available at regional NUTS 3 (Border, Midlands, West) and NUTS 2 (BMW, S&E) level.

Figure 11: Index of GVA for NUTS 3 Regions 2003-2012 (EU 28=100)



Source: CSO County Incomes and Regional GDP 2009, Table 10

The Border and Midland regions as well as the South East, Dublin & Mid East and Mid West are all lower relative to the EU index in 2012 than they were in 2003 (see Figure 11). The Border is now at 72.1 while the Midland region is 70.6. In contrast Dublin & Mid East is at an index point of 164.1 while the South West is higher at 168.2. The index for the West was the lowest of the Irish regions in 2003 at 94.9 but has performed much better since and was 107.1 by 2012. Only the West region is better off relative to the EU average compared to 2003.

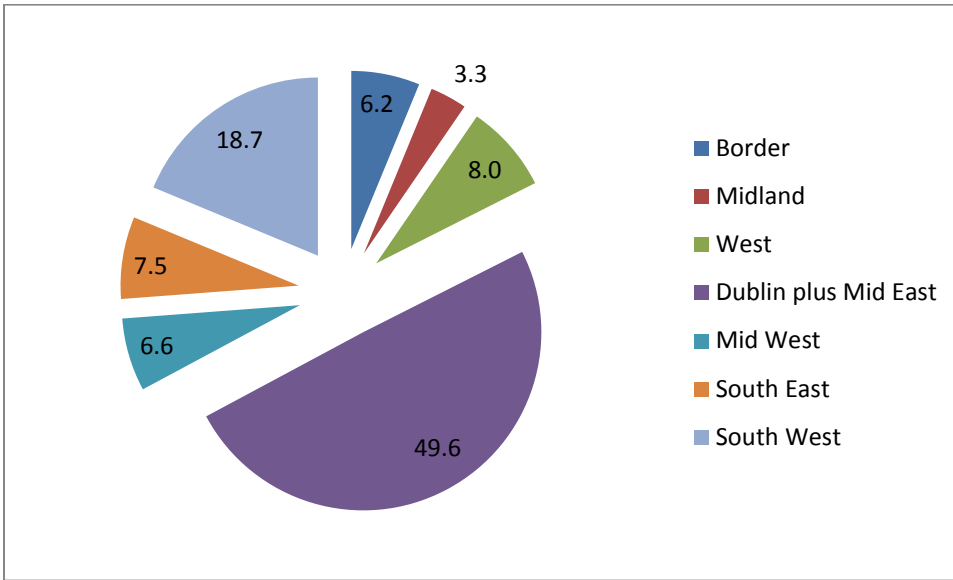
In this index (EU 28=100) the State was 130.0 in 2012, a decline on 147.0 in 2007 (Table 11 in CSO report). It was 84.3 in the BMW (104.9 in 2006, its highest relative to the EU average) and 147.0 in the S&E (163.7 in 2007).

Contribution to GDP

The very significant contribution of Dublin & Mid East to GDP is illustrated below producing almost 50% of national GDP²³. Dublin, the Mid East and the South West combined produce more than two thirds (68.3%) of national GDP. Despite good growth in the West Region, it still only produces 8% of the national GDP (though this was the third highest regional contribution).

²³ Dublin alone produced almost 42% of national GDP. However, given the importance of commuting to this region we have used the Dublin & Mid East combined.

Figure 12: Percentage of GDP Produced in NUTS 3 Regions in 2012

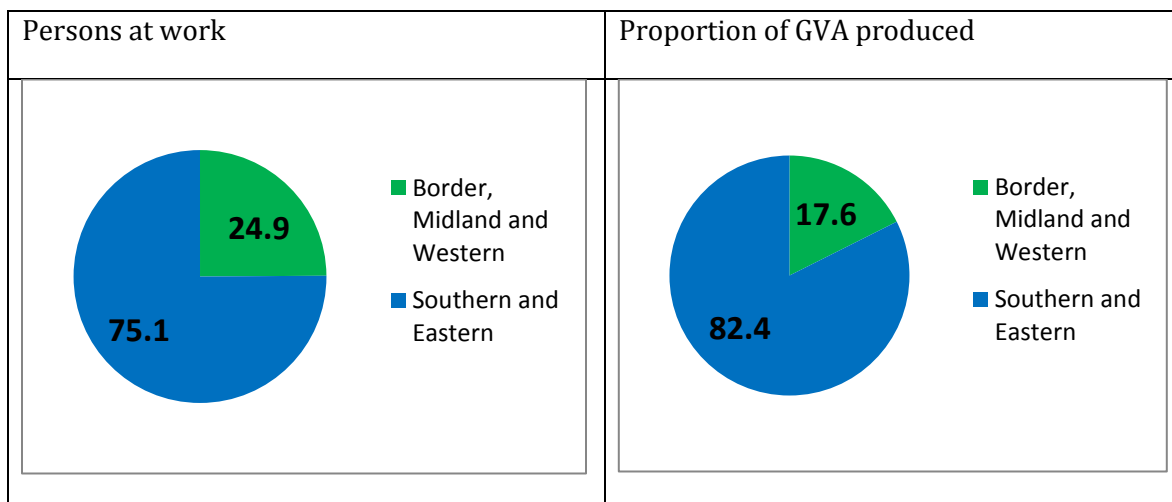


Source: County Incomes and Regional GDP 2012, Table 13

Population at work

In 2012 the BMW region had 24.9 % of the persons at work in the State but only accounted for 17.6% of the national GVA (it had 27.1% of the population). The proportion of persons in Ireland at work in the BMW region declined slightly since 2008 when it was 25.9%. The S&E region produces 82.4% of the GVA and has 75.1% of the people at work (See Figure 16) indicating a higher level of productivity in this region.

Figure 13: Persons at work and Proportion of GVA produced, NUTS2 region, 2012



Source: CSO County Incomes and Regional GDP 2009, Table 17

The proportion of GVA produced in the BMW region (17.6%) is lower than the proportion at work (24.9%) indicating the lower level of value added in the Region’s produce, i.e. the outputs produced by the people employed in the BMW are worth less than those produced by employees in the South and East. This is because of the higher levels of capital invested, making it possible for each worker to produce more, which in turn is depended on the types of enterprises in each region and can also be because of higher employees skill levels²⁴. It needs to be remembered that these figures are also influenced by commuter flows (mainly from the BMW into the S&E) so that although the commuting person is counted in the persons at work statistic, his or her output will be counted in another region. Nonetheless, they do also indicate the lower productivity levels in the BMW region.

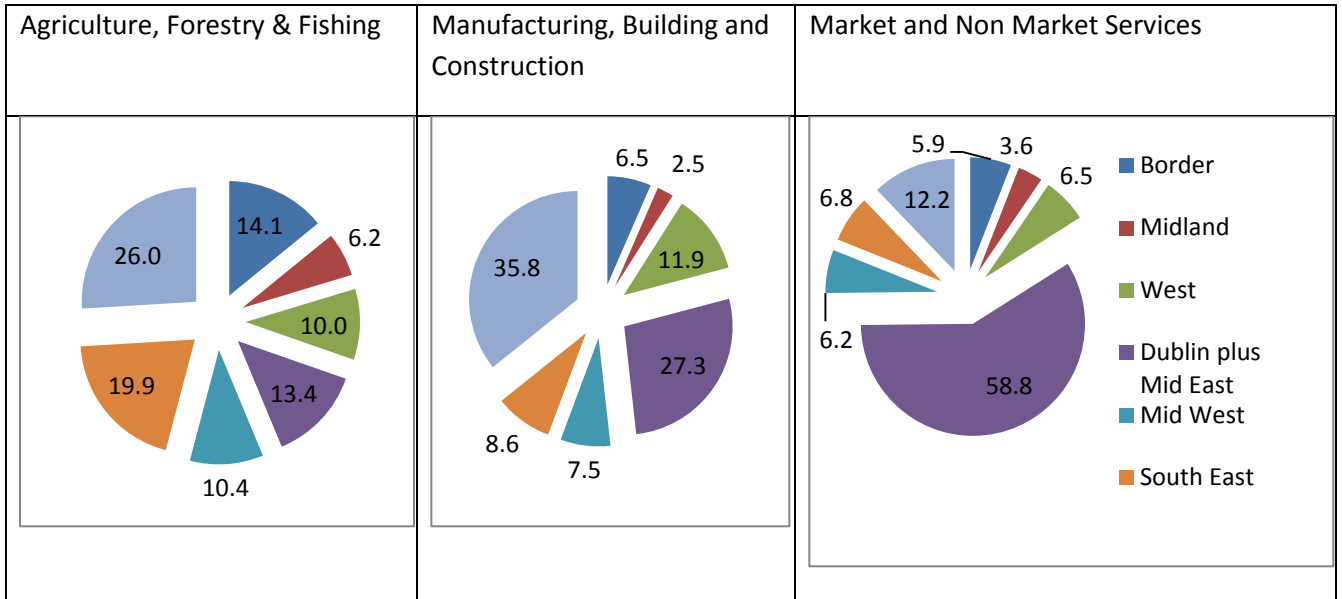
Gross Value Added from each region for major sectors

The BMW region contributed almost a third (30.3%) of the national GVA from Agriculture, Forestry and Fishing in 2012, a significant increase on 2011 (26.7%). In 2012 the BMW contributed just over a fifth of the National GVA from Manufacturing, Building and Construction (20.9%) and similarly 16.0% of the National GVA for Market and Non Market Services came from the BMW Region which is a small decrease on that in 2011 (16.5%).

Moving to NUTS 3 level the contributions of the different regions to GVA in each of the branches are shown in Figure 14 below.

²⁴ It may also be influenced by the level of transfer payments.

Figure 14: Percentage share of GVA for each branch produced in each Region.



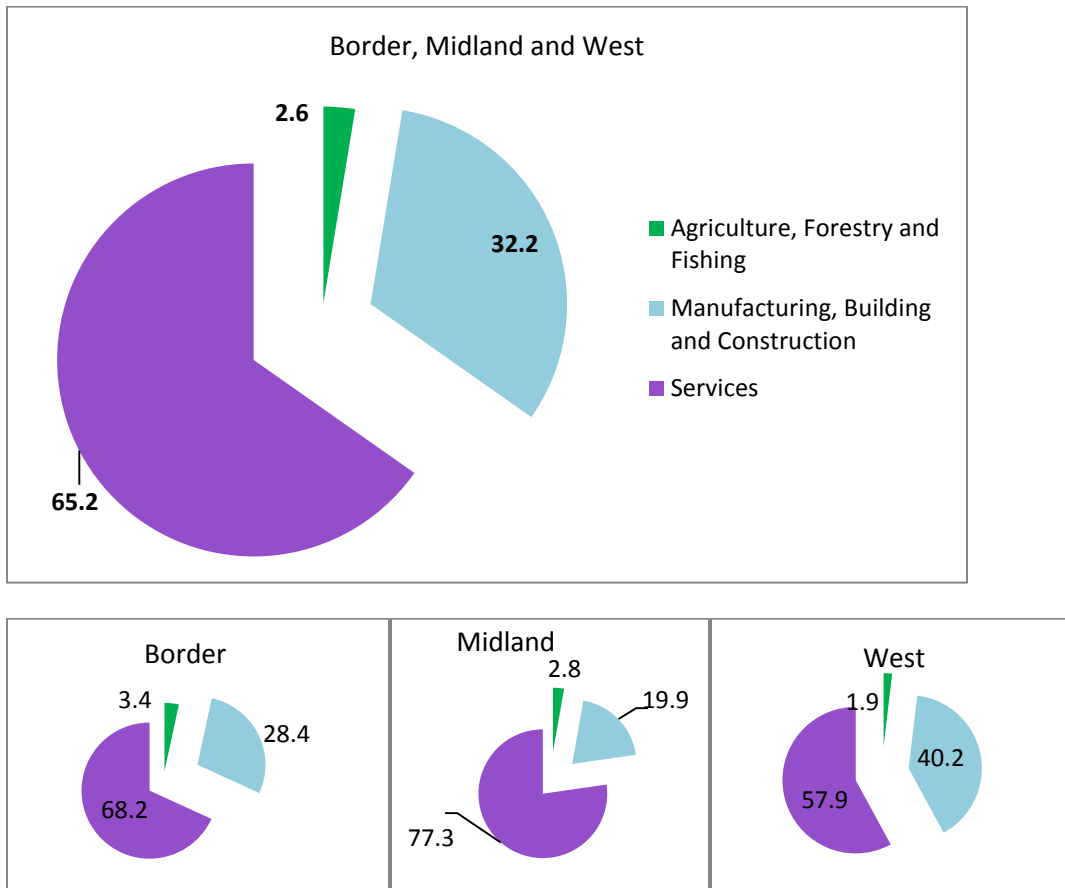
Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 17

Not surprisingly given the quality of land and the farming enterprises (the higher level of dairying and tillage in particular), the South West and South East are the major generators of GVA for Agriculture, Forestry and Fishing. In addition, the South West contributes more than a third (35.8%) of the GVA from Manufacturing, Building and Construction, while Dublin & Mid East generates more than half of national GVA from services.

Share of GVA from major sectors

There was very little change in the share of GVA from the three major sectors (Agriculture, Forestry and Fishing; Manufacturing, Building and Construction; and Market and Non Market services) in the BMW region for 2012 as compared to 2011. The importance of the different shares is illustrated in Figure 15 below for the BMW as a whole and then for each of its constituent regions.

Figure 15: GVA from Major Sectors



Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 16

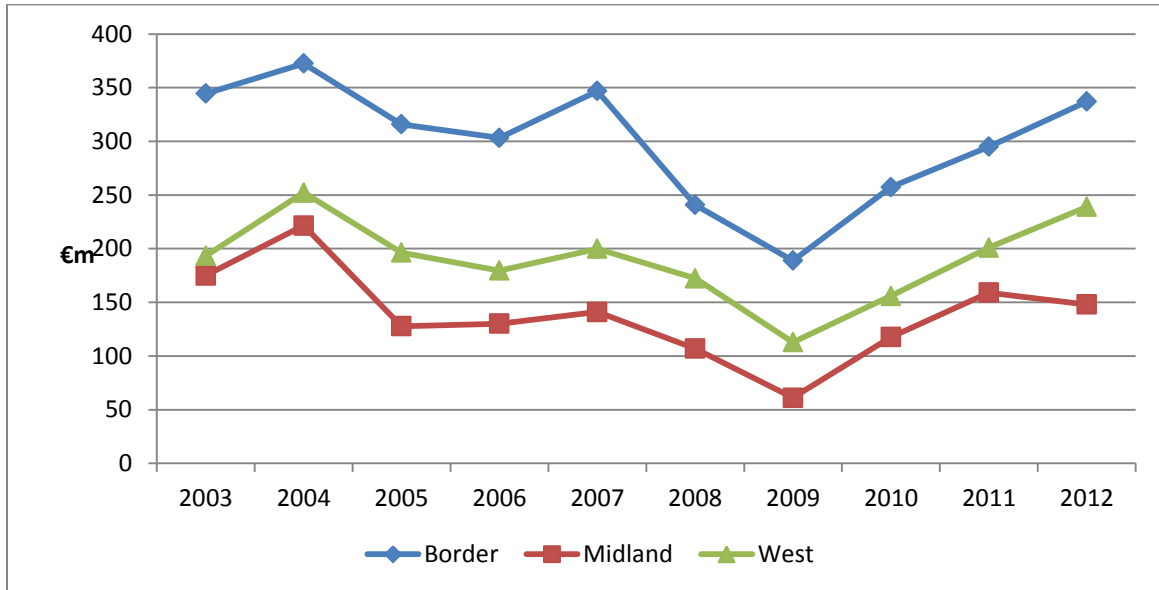
Manufacturing is much more significant in the West region (40.2% of GVA) than in with Border or Midland regions. By comparison, 51% of South West GVA is from manufacturing. Services are more significant in the Midland region (77.3%), and Agriculture is slightly more important in the Border region (3.4%).

In GVA terms, Agriculture, Forestry and Fishing share is still marginally more significant in the BMW (2.6% of GVA in 2012 up on 2.5% in 2011) than in the S&E (1.3% in 2012, down from 1.4% in 2011). This is down from 7.2% (for BMW) of GVA (2.4% S&E) in 2000. However, although the proportion of GVA from Agriculture, Forestry and Fishing is higher in the BMW the value (€725m) of the output is higher in the S&E region (€1,664m).

Although GVA from Agriculture declined (with some fluctuation) in all three of the Border, Midland and West regions between 2003 and 2009, since then there has been growth in the GVA from this branch, with Agriculture, Forestry and Fishing in the Border region almost back to the same value as in 2003, while in the West GVA from Agriculture, Forestry and Fishing is greater than in 2003. In the Midland output from this branch has performed less well and in

2012 was still below the 2003 level (see Figure 16 below).

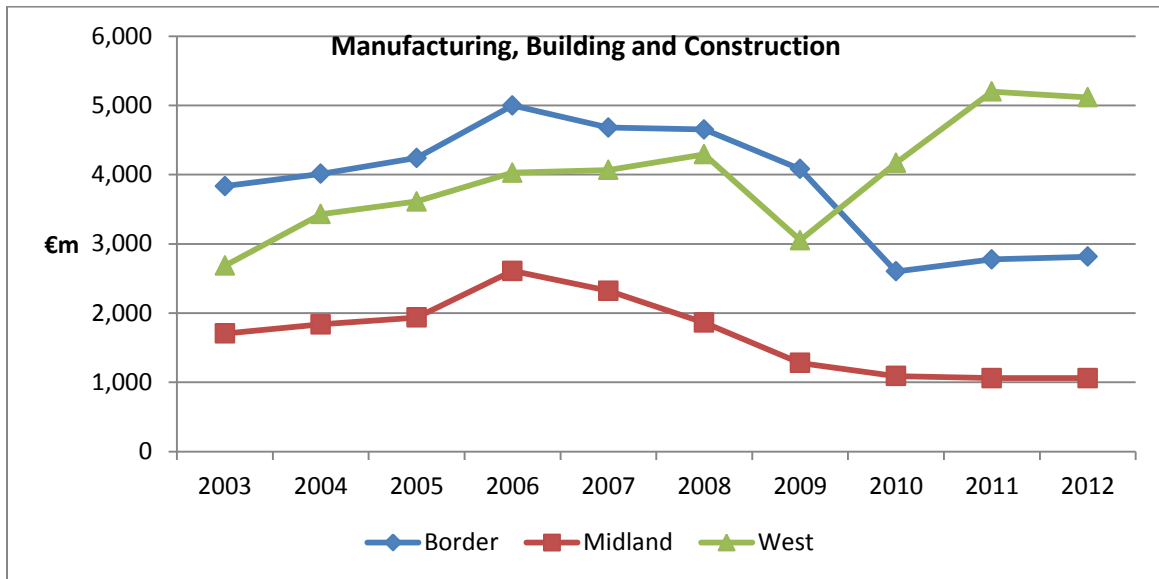
Figure 16: GVA from Agriculture, Forestry and Fishing in Border, Midland and West regions 2003-2012



Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 15, 18

The decline in construction and building has affected the output from the Manufacturing, Building and Construction in the Border and Midland regions. In contrast, despite the dip between 2008 and 2009 in this sector in the West this branch has shown very significant growth (most likely because of manufacturing) and has performed very strongly since 2009. Since then the West region has had a higher output from this branch than the Border region (Figure 17 below).

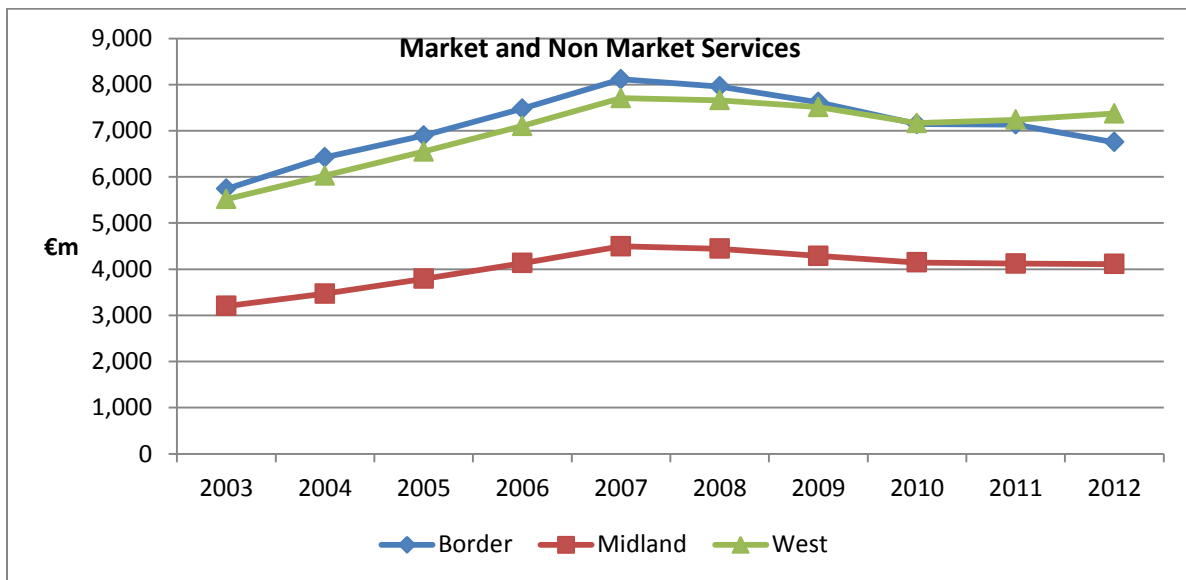
Figure 17: GVA from Manufacturing, Building and Construction in Border, Midland and West regions 2003-2012



Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 15, 18

Finally, in all of the three regions Services has shown a steady growth between 2003 and 2007, with a slight decline since then, although growth in this branch in the West region resumed since 2010.

Figure 18: GVA from Market and Non Market Services in Border, Midland and West regions 2003-2012

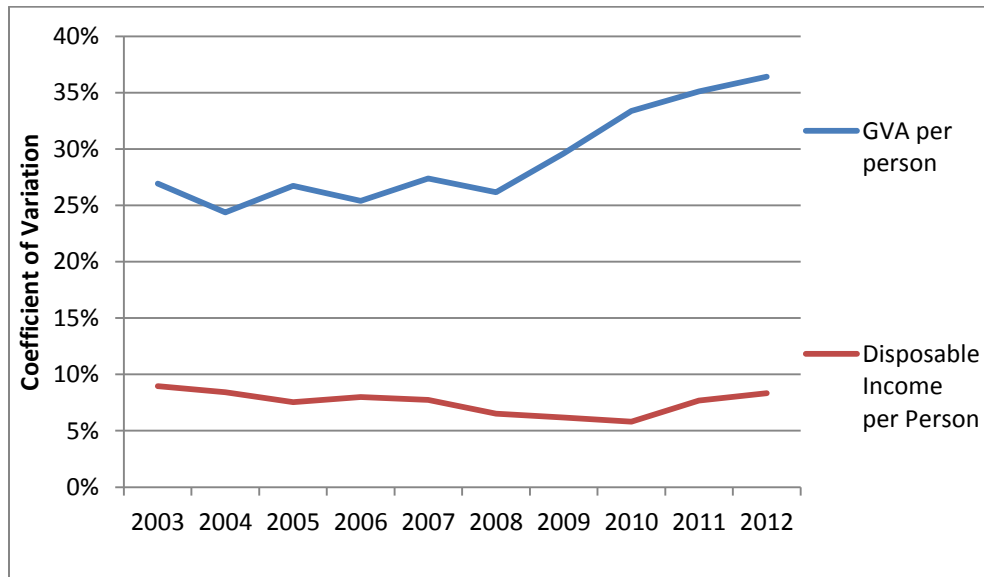


Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 15, 18

Regional Disparities in income and GVA

Disparities in regional GVA have been increasing in recent years, and have widened significantly since 2008, while in contrast disparities in disposable income reduced between 2003 and 2010, but have increased since then. The Coefficients of Variation indicate the level of variation among the regions for regional GVA and disposable income per capita (Figure 19).

Figure 19: Coefficients of variation for GVA per capita and household disposable income per capita, 2003- 2012



Source: CSO, 2015, County Incomes and Regional GDP 2012, Table 3, 9, own calculation²⁵

The widening of disparities in GVA per person is likely to be the result of increased productivity and concentration in high value sectors, and slower recovery in some regions as against more rapid bounce back in the West, South West and Dublin & Mid East regions in particular. The increase in disparities has been particularly significant since 2008.

Disparities in disposable income per person decreased between 2003 and 2010 but have begun to increase since then. The narrowing of the gap in disposable income was a result of transfers including social welfare, while the more recent widening of the disparities is likely to be the result of increases in income in some regions and restricted levels of transfers.

²⁵ The Coefficient of variation for GVA uses Dublin & Mid East combined figure, while the Coefficient of Variation for Disposable Income per person uses Dublin & Mid East separately (as they are not reported together).

International Comparison

It is interesting to compare household incomes and regional GDP in Irish regions with that of similar regions in Europe and in the rest of the world as it gives some measure of the relative situation and level of economic activity in our regions and others.

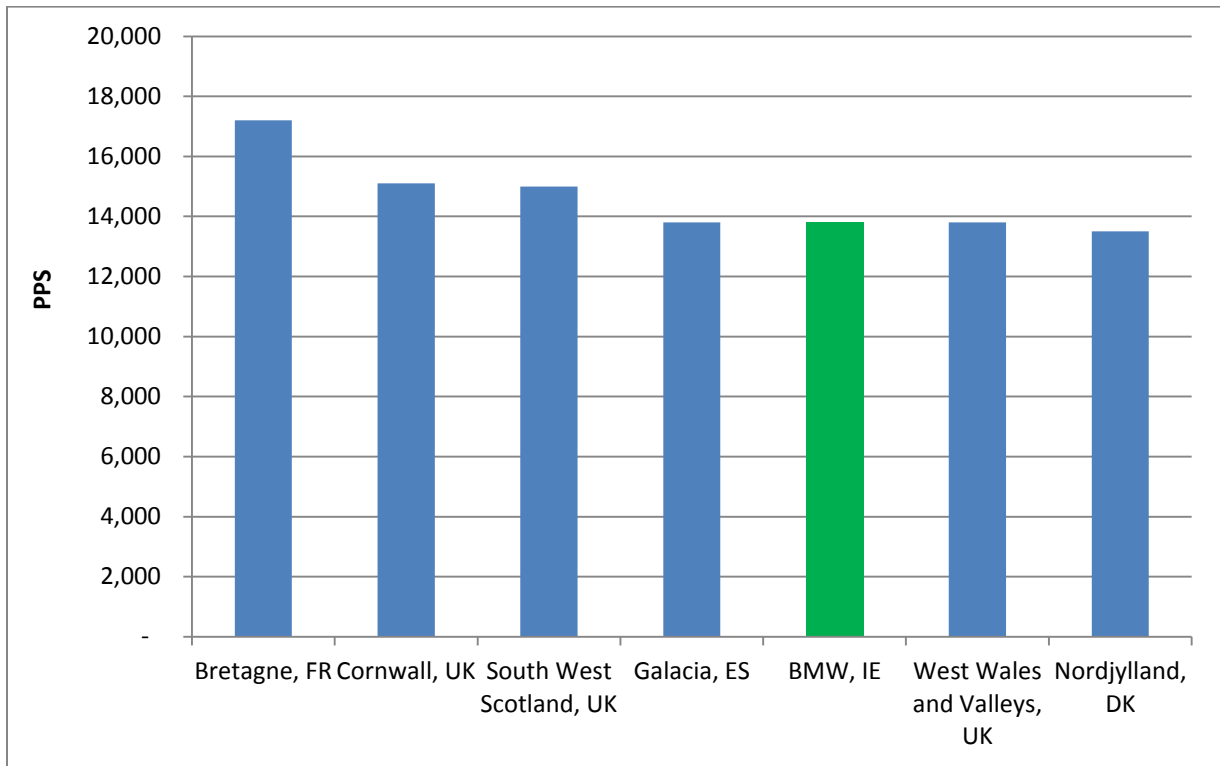
The regions compared here were selected as having similarities with our own Western Region, being maritime and agricultural regions, relatively remote from the main cities or centres of power, and located in temperate climates. While these regions have been selected because of similar characteristics to our own region, (in this case the BMW is used as the NUTS2 level most similar to the Western Region) it is important to recognise that there are many differences among these region in terms of geographical area, population size and density, urbanisation among others. These all make a difference to the regions, as do their government policies and structures and regional policies, which can mean direct comparison is not always meaningful. Nonetheless looking at regions in a similar situation to our own can provide us with insights and models which may be adapted to our understanding and improvement of our region.

Household income in selected EU regions

Seven European regions (NUTS 2) are shown below and the comparison is made with the BMW region in Ireland to ensure that the statistics are directly comparable, they are measured in PPS²⁶. A snapshot of incomes in selected regions for 2011 is shown below (Figure 20).

²⁶ The PPS (purchasing power standard) is an artificial currency that takes into account differences in national price levels. The unit allows meaningful volume comparisons of economic indicators in different countries.

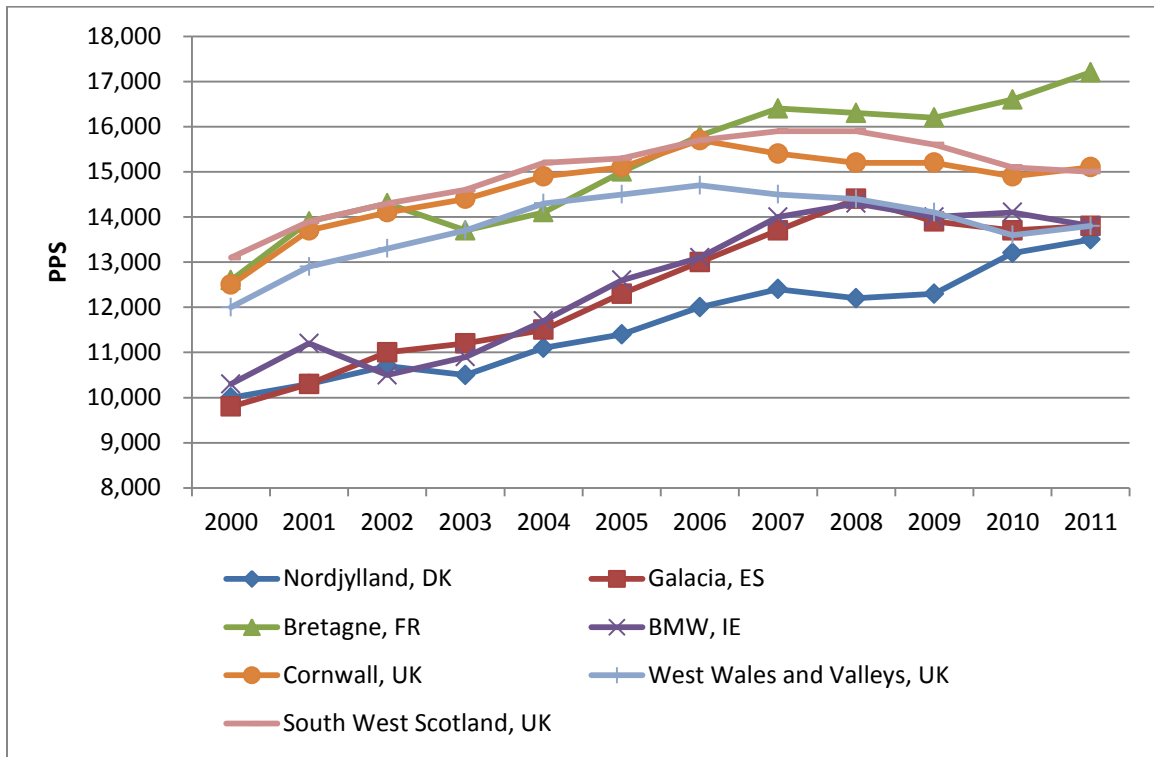
Figure 20: Disposable Household Income Per Capita, selected European regions



Source: Eurostat, Disposable income of private households by NUTS 2 regions (tgs00026), PPS (based on final consumption) per inhabitant, 2011

Income in the BMW in 2011 was low relative to some of the regions selected. However, in 2011 incomes in the BMW region were significantly lower than those in the BMW in 2008 and were strongly influenced by the national economic situation. Therefore it is better to look at these regions over time. Household income in all of the regions was higher in 2011 than 2000 (see Figure 21), and it grew in all regions in until 2006 and in some regions until 2008, with a decline in most since then (Brittany and Njordlland are the exceptions to this).

Figure 21: Disposable income of private households in selected European Regions



Source: Eurostat, Disposable income of private households by NUTS 2 regions (tgs00026), PPS (based on final consumption) per inhabitant, 2000-2011

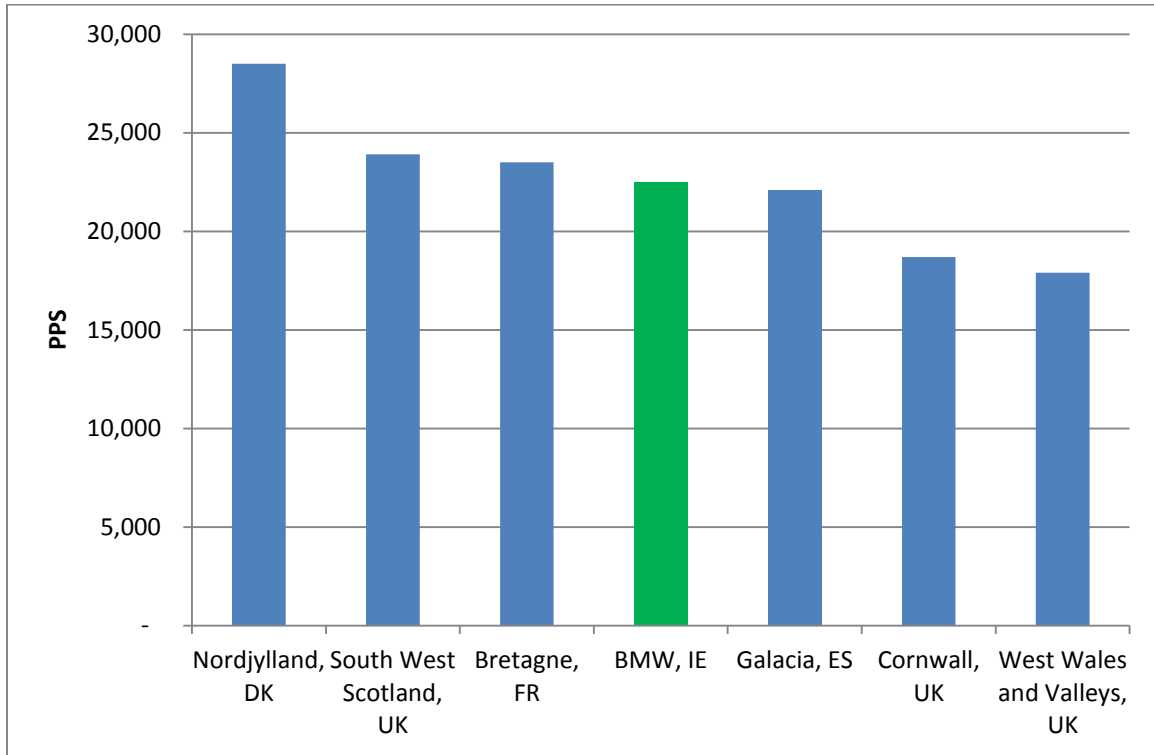
GDP in selected European regions

The GVA of the BMW region is compared to that in the same European regions which were considered above²⁷. Eurostat recently released data for 2013 at NUTS 2 level (data discussed previously in this report is for 2012, the most recently released by the CSO).

Nordjylland has the highest GDP of the regions compared even though, as was noted in the income section, because of higher taxes and social transfers exiting that region, disposable income for the same year is the lowest of these regions.

²⁷ GVA is referred to as regional GDP in the figures below and the comparison is in PPS

Figure 22: Regional gross domestic product (PPS per inhabitant) by NUTS 2 regions, 2013

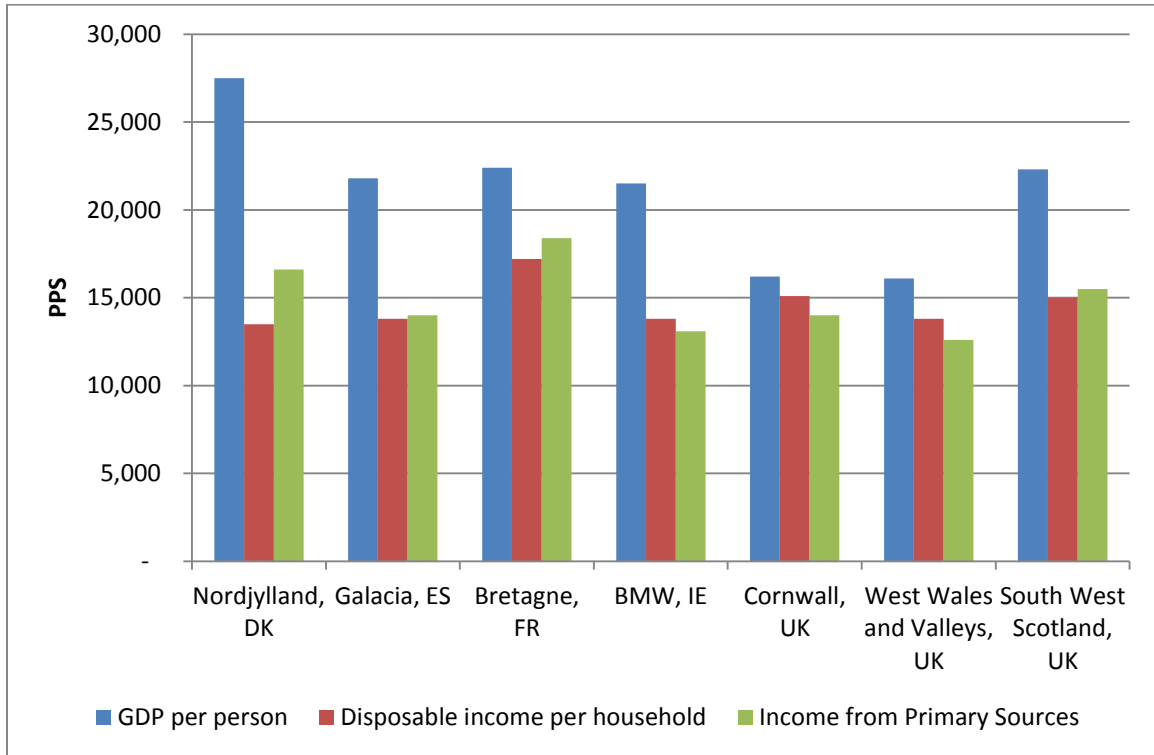


Source: Eurostat Regional gross domestic product (pps per inhabitant) by NUTS 2 regions, tgs 0005

The GVA for each region (per inhabitant) varies from 28,500pps in Nordjylland to 17,900pps in West Wales and Valleys. The GDP in the BMW was 22,500pps in 2013, just below that in Brittany and just above that in Galicia. It will be useful in the future to consider the changes in GVA levels by region over time and relate these changes, where possible, to regional policies.

It is also interesting to look at the differences between regional GDP and disposable income, as well as the levels of income from primary sources (Figure 23). In four of the selected regions (Brittany, SW Scotland, Galicia and Nordjylland) income from primary sources is greater than household disposable income, indicating a relative movement of taxes and social transfers out of that region. The most significant different is in Nordjylland in Denmark where disposable income is 13,500pps and income from primary sources was 16,600pps showing the relatively higher tax rates in Denmark and outflows from the region and is reflective of the higher taxation levels in Denmark. These taxes are used to fund services in the regions but much of this service provision is not captured by the income data.

Figure 23: Regional GDP, Household Disposable Income and Income from Primary Sources.



Source Eurostat various tables²⁸

Brittany has the highest disposable income and the highest income from primary sources, indicating an active economy with strong employment. In contrast West Wales has the lowest GVA, disposable income and income from primary sources, also though the BMW has only marginally higher income from primary sources (13,100pps). In contrast in Cornwall, BMW and West Wales and Valleys disposable income per household (per inhabitant) is higher than primary income indicating a higher level of social transfers into those regions.

Again, in future, it will be useful to compare employment levels, dependency ratios and economic activities and structure in these regions to assess how policy has and can make a difference to income and output in these regions.

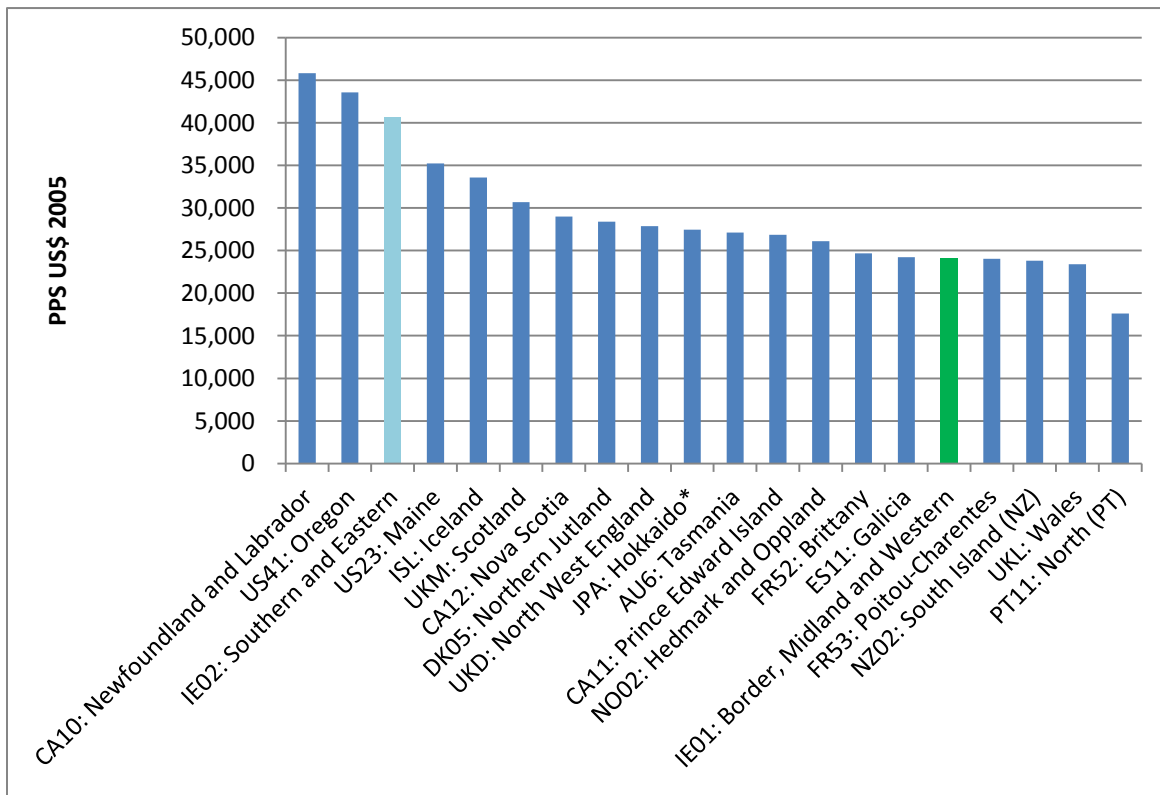
²⁸ Regional gross domestic product (PPS per inhabitant) by NUTS 2 regions (tgs00005) Disposable income of private households by NUTS 2 regions PPS (based on final consumption) per inhabitant (tgs00026); Primary income of private households by NUTS 2 regions, PPS per inhabitant, (tgs 00036).

Comparison with OECD regions

While it is useful to make an income comparison with other EU Regions, it is also interesting to consider how we compare in terms of GDP for similar regions of Europe and the wider OECD. Using Eurostat and OECD data means that the statistics can be compared despite differences in data collection²⁹.

Looking at other regions in OECD countries (again selected for similarity of climate, distance from capital and agriculture and maritime opportunities) it is interesting to compare their GDP with that in the BMW. The BMW (in 2011, Figure 24) had a regional GDP of \$24,046 (pps) which was among the lower of the regions selected for comparison (overall in the OECD, the BMW GDP ranked for 2011 was 235 of 553).

Figure 24: Regional GDP, per head, constant prices, constant PPS (US\$, 2005), OECD base year

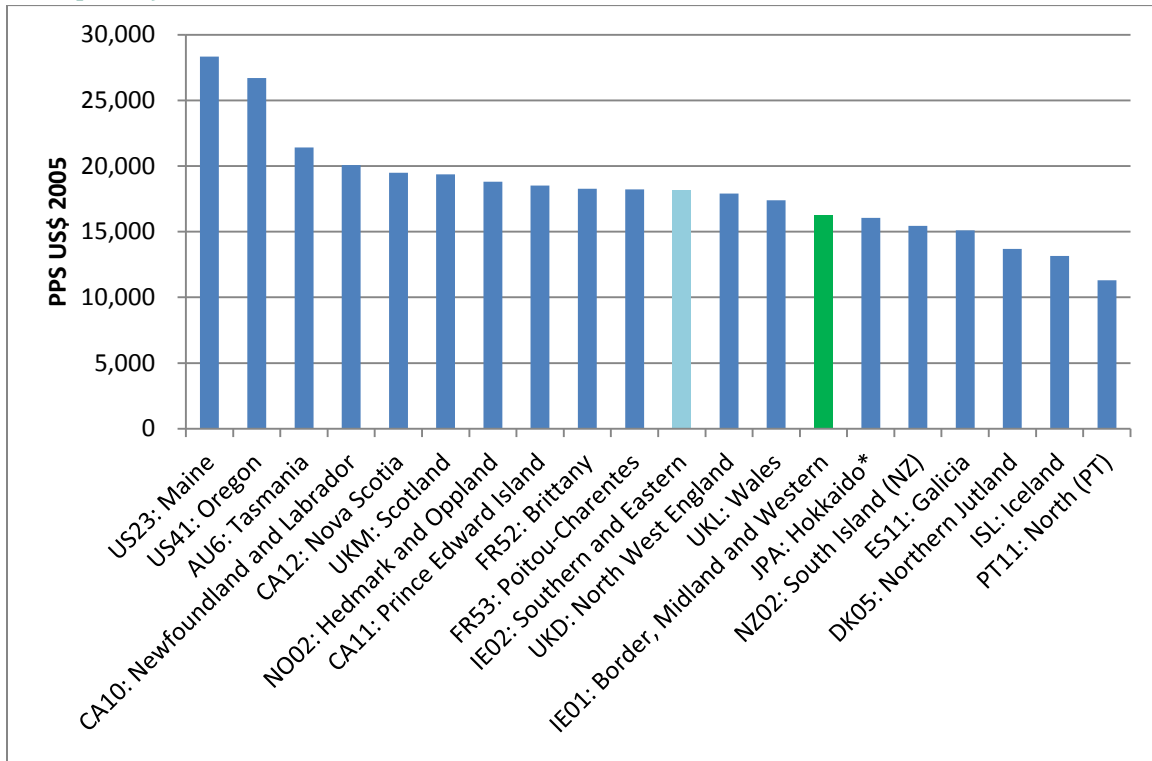


Source: OECD Regional GDP, per head, constant prices, constant PPP, OECD base year 2005. *2010data

²⁹ They also use the PPS (purchasing power standard) is an artificial currency that takes into account differences in national price levels. This unit allows meaningful volume comparisons of economic indicators over countries. Aggregates expressed in PPS are derived by dividing aggregates in current prices and national currency by the respective Purchasing Power Parity (PPP).

Most of the regions selected for comparison had a regional GDP between \$23,500³⁰ and \$29,000. In contrast the Southern and Eastern region was (\$40,664) in the top three of the regions selected and ranked 62 of 553 for regional GDP.

Figure 25: Disposable Income of Private Households per capita, 2011 (USD PPP at constant 2005 prices)



Source: OECD How's Life in Your Region? <http://www.oecd.org/regional/how-is-life-in-your-region.htm> *2010data

These comparisons show the relative state of Irish regions in an international context. Although the regions are similar in terms of their rurality, environmental quality and relatively high quality of life, there are of course considerable differences in their incomes and GVA. While the similarities are interesting, other factors, for example jobs, incomes and access to services vary significantly and are the result, at least in part, of policy decisions in and for that region. This is discussed in a recent WDC Insights blog post [How's Life in Our Region?](#) It would be useful, in future, to try to understand the policy decisions and regional characteristics which give rise to the differences in the scores and see what we can learn from them. It will also be informative to continue to compare ourselves to these same regions in the future.

³⁰ Figures are given in US dollars at 2005 level using a Purchasing Power Standard (PPS)

The BMW was in a similar position for disposable income relative to other selected comparator regions (14/20) as it was for GDP (16/20), while the S&E is lower for disposable income ((11/20) than for GDP (3/20) indicating the differing influence of taxes and transfers. Many other regions ranked differently with Iceland and Northern Jutland relatively less well off on incomes statistics while Tasmania improved rank significantly.

The WDC will work to refine and develop these international comparators so that changes over time can be monitored.

Conclusions

Examining regional indicators helps us understand where growth and development is taking place and to highlight changes and assess issues of efficiency and equity among regions. Household disposable income in the Western Region was €17,735 which was 91.1% of that for the State (€19,468). There is still, however, significant variation among counties, with Galway having the highest, €18,890, and Donegal the lowest €15,921. There was a small rise in disposable income in the region between 2011 and 2012, although not all counties experienced it. Income levels are dependent on the characteristics of the county in terms both of economy and population which influence levels of primary income and the inflow of State transfers. They are also influenced by broader government policy and its impact at local level.

The improvement in incomes in 2012 in some counties (particularly Galway and Sligo) was indicative of the gradual improvement in the national economy, however, three Western Region counties (Donegal, Leitrim and Clare) experienced a decline in disposable income, and in Mayo and Roscommon the growth in income was less than 1%.

Using an index of GVA where the State is 100 (€34,308 per person), in 2012 the Border region was 55.4 (€19,016 per person), and the West region 82.4 (€28,256 per person). There has been a widening of disparities among regions since the recovery began. This is of great concern and it is to be hoped that as the benefits of economic recovery spread to other regions that this disparity will narrow once again. This will depend on the structure and nature of the recovery as well as on the focus of government policy and recognition that growth in all regions benefits the whole country.

While income figures are indicative of both economic activity and State transfers which reduce disparities in income in the population the output figures for the regions (GVA) highlight the level of activity in the regional economy. The regional disparities are greater in these figures and the differing contributions of each region to national GVA is also made clear. Overall disparities in GVA among regions are increasing while variations in income are relatively stable (although recent years show more variation).

While Dublin & Mid East contribute almost 50% (49.6%) of national GVA, the West contributes 8.0% and the Border 6.2%. These figures are of course influenced by the numbers of economically active people, as well as the productivity and the levels of capital in each of the

regions. Government policy also has a significant impact particularly in relation to investment in the regions.

It has been interesting to compare the our region (using the BMW as a proxy) with other regions in Europe, and while figures this year can only give a snapshot, monitoring relative changes in future, and examining policy trends in these other regions will help to highlight areas where our region is performing well, and policies and action that we could learn from in other regions.

It is intended that these comparisons will be continued by the WDC into the future to add to our understanding of policy, economic and other influences on regional performance. Identifying common characteristics in adaptability, developing unused resources and building on regions assets can help to identify opportunities for policy and development to promote regional resilience and adaptability.

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